

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Logistics and Supply Chain Management

Programme: BBA Oil and Gas

Time: 03 hrs.

Max. Marks: 100

Semester: III

C.Code: LSCM2002

Max. Marks: 100

Instructions:

SECTION A (20 Marks) Attempt All questions

S. No.		Marks	CO
Q 1.	Briefly explain the following	2	CO1
a)	SWAP is a strategy used to overcome supply chain issues and challenges in oil and gas, SWAP refer to _____.	2	CO2
b)	_____ is a common user facility with public authority status, equipped with fixed installations and offering services of handling and temporary storage of any kinds of goods, Custom Bonding, Custom Control and Clearance.	2	CO1
c)	Document issued by railway authority for transport of goods through rail mode of transportation is _____.	2	CO1
d)	_____ can be defined as integrating environmental thinking into supply-chain management, including product design, material sourcing and selection, manufacturing processes, delivery of the final product as well as end-of-life management of the product after its useful life.	2	CO2
e)	Document issued by airline for transport of goods through air mode of transportation is _____.	2	CO1
f)	_____ is a letter issued by a bank to another bank (especially one in a different country) to serve as a guarantee for payments made to a specified person under specified conditions.	2	CO1
g)	_____ is a supply chain integrator that assembles and manages the resources, capabilities, and technology of its own organization with those of complementary service providers to deliver a comprehensive supply chain solution.	2	CO1
h)	Michael Porter coined the _____ in 1985 in his book competitive advantage. Divides business in primary and support activities.	2	CO2
i)	_____ is an arrangement under which an exporter instructs the presenting bank to hand over shipping and is also known as Cash against documents.	2	CO1
j)	Demand variability increases as one moves up the supply chain away from the retail	2	CO1

	customer, and small changes in consumer demand can result in large variations in orders placed upstream this is known as _____.		
SECTION B 20 Marks (Answer any four)			
Q	Short Answer Type Question		
	a) Sam runs a mail-order business for gym equipment. Annual demand for the equipment is 16,000. The annual holding cost per unit is INR 2.50 and the cost to place an order is INR 50. Calculate economic order quantity (EOQ)	5	CO5
	b) Role of Information and Communication technology in removing barriers in Oil and Gas Supply Chain?	5	CO3
	c) Differentiate between efficient and responsive Supply Chain?	5	CO4
	d) Explain with the help of a diagram Hub & spoke and milk run model of transportation.	5	CO4
	e) What is material handling equipment? Give example of some of MHE's for petrochemical drum movement/transport?	5	CO5
SECTION-C (30 marks)			
Q	Long Answer Question (Answer any two)		
	a) Differentiate between logistics and supply chain with reference to the article titled Logistics vs Supply Chain Management : An International Survey By Paul D. Larson & Arni Halldorsson.	15	CO3
	b) Explain INCO terms and Payment terms in Global Supply Chain? Explain each of the INCO-term.	15	CO6
	c) Describe the supply chain issues and challenges in Oil and Gas Supply Chain? Suggest some solutions to minimize these issues?	15	CO4
SECTION-D			
Q	Case Study (Attempt all Question)		
	<p>Efficient supply chain in oil and gas</p> <p>The primary goal of every oil and gas company is to find and produce oil. However it has become more challenging in regards to the environments and locations and the respective trade lanes.</p> <p>Therefore optimal logistics and supply chain solutions have to be applied in order to find the best way from the reservoir to the refinery and to keep the supply chains as smooth and visible as possible.</p> <p>An international oilfield drilling contractor's challenge consisted in having a transparent supply chain in order to guarantee rapid deployment of material to its global network of rigs and ensuring its ongoing, efficient operations. This customer did provide supplies and materials to its growing rig operations around the world and it therefore sources products from numerous suppliers throughout the USA. Due to the fact that the company's rig network expanded, its shipping volumes increased and consequently its logistics costs too. For this reason the company was looking for a logistics partner who would help to optimize its supply chain and provide visibility</p>		

	<p>throughout the entire supply chain process.</p> <p>The company chose Panalpina to handle the management of its supply chain. The Panalpina Oil & Gas division in Houston, Texas, therefore plays a pivotal role in the solution; not only optimizing the company's supply chain operations but also identifying further cost efficiency possibilities. Panalpina manages its supply chain management business including the receiving / packing / warehousing / distribution, air and ocean transport, domestic transportation as well as customs clearance and delivery at some destinations for all of the supplies for the company's rigs on a global basis. Panalpina receives all orders in its Houston facility, consolidates them by destination and packs and ships on a regularly scheduled basis to each rig destination. This approach has reduced the number of shipments required thus resulting in cost savings for the company.</p> <p>Further, Panalpina is working with the company's technology, using its in-house system for shipment tracking and information. Panalpina and the company share the same focus on delivering superior value.</p> <p>Panalpina did meet the customer's request by sharing the same focus on delivering superior value and customer service and furthermore leveraged the company to a visible and efficient global supply chain.</p> <p>Challenge</p> <p>It gets more and more important for oil and gas companies to manage and oversee their supply chains in an effective manner in order to reduce cost as well as to enhance and guarantee efficient operations.</p> <p>Solution</p> <p>Panalpina was awarded the supply chain management of a drilling company. The Panalpina Oil & Gas division in Houston offered a solution not only optimizing the company's supply chain operations but also identifying further cost efficiency possibilities by including different value-added logistics services.</p> <p>Result</p> <ul style="list-style-type: none"> • Reduction of shipments • Cost savings • Enhanced supply chain visibility • Increased customer satisfaction • Implementation of track and trace system 		
	1.What were the challenges of oil & gas drilling company supply chain and what solutions can be given to reduce those issues and challenges?	10	CO6
	2. What additional services (Value added Services) are provided by Panalpina oil and gas Supply Chain division?	10	CO5
	3. Panalpina is working as a 3PL for oil and Gas companies for their import and export shipments. Draw a process flow diagram of import procedure at port or ICD?	10	CO7

